

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (currently amended) A telecommunications switching node comprising:  
a plurality of input/output (I/O) ports configured to receive and transmit telecommunications signals;  
a switching core comprising a plurality of switching networks, the plurality of switching networks comprising:  
a north switching network coupled to a first line which traverses only the north switching network in a first direction; and  
a south switching network coupled to a second line which traverses only the south switching network in a second direction opposite the first direction; and  
a backplane connecting each of said plurality of I/O ports to each of said switching networks in said switching core to effect a non-blocking path for each communications signal from any of said I/O ports to any of said I/O ports via at least one of said switching networks in said switching core.
2. (original) The telecommunications switching system of claim 1 wherein said switching system effects a non-blocking path via all of said switching networks in said switching core.
3. (original) The telecommunications switching system of claim 1 wherein said switching core comprises a pair of switching networks.
4. (original) The telecommunications switching system of claim 1 wherein said switching core comprises two pairs of switching networks.

5. (original) The telecommunications switching system of claim 4 wherein one or more of said plurality of I/O ports includes a switching network to effect connection through said backplane to both pairs of switching networks.

6. (original) The telecommunications switching system of claim 5 wherein all of said plurality of I/O ports includes a switching network to effect connection through said backplane to both pairs of switching networks.

7. (new) A method for increasing a capacity of a switching node, the method comprising:

providing a first switching core comprising a first plurality of switching networks;  
providing a second switching core comprising a second plurality of switching networks; and

providing a backplane with connections from each of the first and second pluralities of switching networks of the first and second switching cores to each of a plurality of I/O ports configured to receive and transmit telecommunications signals, wherein the connections among the switching networks and the I/O ports effect a non-blocking path for each communications signal from any of said I/O ports to any of said I/O ports via at least one of the switching networks in at least one of the switching cores.

8. (new) The method of claim 7, further comprising providing a plurality of line cards at the I/O ports of the backplane for at least the first switching core.

9. (new) The method of claim 7, further comprising providing a plurality of tributary cards at the I/O ports of the backplane for at least the first switching core.

10. (new) The method of claim 7, further comprising exchanging a plurality of high capacity line and tributary cards for a plurality of previously provisioned line and tributary cards.

11. (new) The method of claim 10, further comprising fully provisioning the switching node with the high capacity line and tributary cards for the first and second switching cores.

12. (new) The method of claim 7, further comprising:  
deciding which of the first and second switching cores provides a more accurate signal; and  
using the switching core with the more accurate signal.

13. (new) A method for providing a telecommunications switching node, the method comprising:

providing a switching core comprising a plurality of switching networks, the plurality of switching networks comprising:  
a north switching network coupled to a first line which traverses only the north switching network in a first direction; and  
a south switching network coupled to a second line which traverses only the south switching network in a second direction opposite the first direction;  
providing a plurality of input/output (I/O) ports configured to receive and transmit telecommunications signals;  
providing a backplane connecting each of the plurality of I/O ports to each of the north and south switching networks in the switching core to effect a non-blocking path for each telecommunications signal from any of the I/O ports to any of the I/O ports via at least one of the north and south switching networks in the switching core.

14. (new) The method of claim 13, further comprising expanding a capacity of the telecommunications switching node.

15. (new) The method of claim 14, further comprising adding a second switching core, the second switching core comprising:

a second north switching network coupled to the first line which traverses only the second north switching network of the second switching core in the first direction; and

a second south switching network coupled to the second line which traverses only the south switching network of the second switching core in the second direction opposite the first direction;

16. (new) The method of claim 15, wherein adding the second switching network core doubles an original capacity of the telecommunications switching node.

17. (new) The method of claim 16, further comprising exchanging a plurality of high capacity line and tributary cards for a plurality of previously provisioned line and tributary cards.